IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

ORDER

#1293

PROHIBITING THE DRILLING OF NEW DOMESTIC WELLS IN THE PAHRUMP ARTESIAN BASIN (10-162), NYE COUNTY, NEVADA.

WHEREAS, the State Engineer has designated the Pahrump Artesian Basin as provided under NRS § 534.120 by the following orders:

- 1. Order No. 176 dated March 11, 1941, designating and describing the basin pursuant to NRS \$534.120 upon the petition of ten percent of the legal appropriators of underground water.
- 2. Order No. 193 dated January 15, 1948, extending the designated area.
- 3. Order No. 205 dated January 23, 1953, further extending the designated area.

WHEREAS, the State Engineer has issued the following orders concerning the regulation and management of groundwater in the basin:

- 1. Order No. 206 dated May 4, 1953, requiring the installation of measuring devices.
- 2. Order No. 381 dated June 1, 1970, declaring irrigation a non-preferred use, ordering that new applications for irrigation be denied.
- 3. Order No. 955 dated October 26, 1987, amending Order No. 381, denying applications on the Pahrump and Manse fans, restricting applications to small commercial uses and forfeiture re-filing provisions.
- 4. Order No. 1107 dated November 8, 1994, denying all new applications to appropriate except small commercial, small industrial and environmental uses.
- 5. Order No. 1183 dated April 19, 2007, establishing a program for domestic well credits in the basin.
- 6. Order No. 1252 dated April 29, 2015, further extending the designated area, lifting the prohibition of moving existing water rights to the Pahrump and Manse fans and curtailing all new appropriations except for very limited exceptions.

WHEREAS, the State Engineer makes the following additional findings and conclusions in support of this Order:

- 1. The State Engineer estimates that the perennial yield of the Pahrump Artesian Basin is 20,000 acre-feet annually.1
- 2. The committed rights in the form of permits and certificates to the use of groundwater in the basin are approximately 59,175 acre-feet. This amount does not include the amount allowed to be withdrawn by existing domestic wells.²
- 3. A "domestic well" is a well used for culinary and household purposes directly related to a single-family dwelling, including without limitation, the watering of a family garden and lawn and the watering of livestock and any other domestic animals or household pets, if the amount of water drawn does not exceed 2 acre-feet per year. (NRS §§ 534.013 and 534.180).
- 4. There are approximately 11,280 existing domestic wells drilled in the Pahrump Artesian Basin. Pursuant to NRS § 534.180, domestic wells are exempt from the permitting requirements of NRS Chapters 533 and 534 having the legal right to withdraw up to 2 acre-feet annually. Thus, in the Pahrump Artesian Basin, the ability of existing domestic wells to withdraw up to 2 acre-feet annually exceeds the perennial yield by domestic wells alone.3
- 5. The existing domestic wells in the Pahrump Artesian Basin constitutes the greatest proliferation and density of domestic wells in the state. The density of existing domestic wells ranges from 1 up to 469 wells per square mile. The State Engineer has determined that pumping by domestic wells has the potential to be the largest use of groundwater in the basin.4
- 6. In addition to existing domestic wells, there is potential for up to 8,000 new domestic wells to be drilled on existing parcels for which no domestic well currently exists. Consequently, the drilling of up to 8,000 new domestic wells, represents the legal right to withdraw up to an additional 16,000 acre-feet of groundwater by those new domestic The state of the s wells.5

³ Nevada Division of Water Resources' Well Log Database, December 19, 2017, official records in the Office of the State Engineer, available at http://water.nv.gov/welllogquery.aspx.

ghts C Nevada Division of Water Resources' Water Rights Database, Hydrographic Basin Summary, Pahrump Artesian Basin (162), accessed December 19, 2017, official records in the Office of the State Engineer, available at http://water.nv.gov/undergroundactive.aspx; State Engineer's Order 1252.

 $^{^{2}}$ Id.

⁴ Id.; Nye County Water Resources Plan (2004) and Plan Update (2017); Division of Water Resources Groundwater Pumpage Inventories Pahrump Valley Hydrographic Basin 10-162. ⁵ *Id*.

- 7. In 1993, Senate Bill 19 was passed, which acknowledged a policy of recognizing existing domestic wells as appurtenances to private homes and created a protectable interest in the source of supply to the domestic well. As originally enacted, it applied to counties having a population less than 400,000.6 Senate Bill 19 was codified in NRS § 533.024(1)(b).
- 8. In 2001, the legislature passed Senate Bill 159, which removed the limitation in NRS § 533.024(1) to counties having a population less than 400,000, making that provision and related provisions applicable statewide.⁷
- 9. In testimony on Senate Bill 159, former State Engineer Michael Turnipseed agreed with Senator Maggie Carlton that a "protectable interest" only occurs after there has been an improvement on the property and a well has been drilled, and that citizens cannot claim a "protectable interest" without anything on the property.
- 10. During the 1999-2000 legislative interim, the Subcommittee to Study Domestic and Municipal Water Wells and its Technical Advisory Committee convened numerous meetings to study issues related to domestic and municipal wells.
- 11. An issue identified by the Interim Subcommittee was that land division laws under NRS Chapter 278 were problematic because parcel maps and other types of land division do not require water rights to be attached to newly created parcels, unlike subdivision approvals. Testimony before the Subcommittee indicated that many counties enacted ordinances requiring water rights be attached to new parcel creations, but that existing parcels were exempt from that requirement.
- 12. In 1998, Nye County initiated a temporary moratorium on land parceling until the Pahrump Regional Planning Commission could develop an ordinance to be enacted by the County Board of Commissioners. The ordinance ultimately enacted by the Board of Commissioners requires that a person who parcels land in Pahrump Valley is required to deed water rights to the County for each additional lot that is created through parceling.⁹
- 13. The concern of the Interim Subcommittee regarding parceling land without requiring water rights is typified by the existing condition in the Pahrump Artesian Basin. Although the County Board of Commissioners enacted an ordinance requiring water rights for any new parcels created, the ordinance did not apply to parcels already in existence.

⁶ Senate Bill 19, Chapter 631, Statues of Nevada 1993.

⁷ Senate Bill 159, Chapter 85, Statutes of Nevada 2001.

⁸ Legislative Counsel Bureau Bulletin No. 01-18, *Domestic and Municipal Water Wells* (November 2000).

⁹ Nye County Water Resources Plan (2004); and see current Nye County Code § 16.28.170 available at

 $[\]label{limit} http://sterlingcodifiers.com/codebook/index.php?book_id=648\&chapter_id=71572\#s705292.$

- 14. Testimony related to Senate Bill 19 (1993), Senate Bill 159 (2001) and during the 1999-2000 Interim Subcommittee all confirm that inclusion of the "protectable interest" language in NRS Chapters 533 and 534 was not intended to limit the State Engineer's ability to regulate and manage the Nevada's water resources. ¹⁰
- 15. NRS § 534.120 authorizes the State Engineer to make such rules, regulations and orders deemed essential for the welfare of the area involved in designated groundwater basins when the groundwater basin is being depleted in the judgment of the State Engineer.
- 16. NRS § 534.110(8) provides that in any basin or portion thereof in the state designated by the State Engineer, the State Engineer may restrict drilling of wells in any portion thereof if the State Engineer determines that additional wells would cause an undue interference with existing wells.
- 17. Historical water level data maintained by the State Engineer and other agencies demonstrate that water levels on the valley floor have steadily declined since the 1950s. Despite numerous orders by the State Engineer regulating groundwater in the basin, water levels on the valley floor have not stabilized. In addition to declining water levels, issues related to declining water levels in the basin are well-documented, including impacts to springs and land subsidence.¹¹
- 18. Overwhelmingly, existing domestic wells are located on the valley floor where water levels are declining. Similarly, any new domestic wells would largely be located on the valley floor.
- 19. In a 2017 update to the Nye County Water Resources Plan, data and maps from the Water Level Management Plan were used to examine the longevity of existing shallow wells, primarily domestic wells, in areas of measure and sustained water table declines. The data and simulations predicted that 438 wells would fail by 2035, and the number of failed wells would reach 3,085 by 2065. The study did not take into account anticipated increases in future demand; therefore, additional demand created by new domestic wells would be expected to accelerate water level declines and predicted well failures. 12

¹⁰ See fn. 6, 7 and 8, and minutes of testimony related thereto.

Nevada Division of Water Resources' Water Level Database, December 19, 2017, official records in the Office of the State Engineer, available on-line at http://water.nv.gov/WaterLevelData.aspx; water level records maintained by the United States Geological Survey; Harrill, J., Ground-Water Storage Depletion in Pahrump Valley, Nevada-California 1962-75, (Department of Conservation and Natural Resources and United States Geological Survey), 1986; and see also, fn. 4.

¹² Nye County Water Resources Plan Update (2017); Klenke, J., Estimated Effects of Water Level Declines in the Pahrump Valley on Water Well Longevity (January 2017).

- 20. The drilling of up to 8,000 new domestic wells endangers the continued supply of groundwater within the basin, including the supply to existing rights and existing domestic wells.
- 21. The State Engineer has determined from existing water level and other data that the groundwater basin is being depleted, and that this order is essential for the welfare of the area involved.
- 22. Requiring the acquisition and relinquishment of water rights to serve new domestic wells on existing parcels is consistent with Nye County Code § 16.28.170, which, since 1998, has required water rights for the approval of new parcel maps;
- 23. Similarly, requiring the acquisition of water rights to serve new domestic wells is consistent with the legislature's intent expressed in other areas of the law that there must be sufficient water available to grant new appropriative rights or to approve parcel and subdivision maps intended to be served by domestic wells. See NRS §§ 533.070; 534.120(e); 278.335 and 278.461.
- 24. Allowing the unrestrained drilling of additional domestic wells in a basin that is already more than two-times overappropriated is inconsistent with the State Engineer's prior orders regulating and restricting appropriative rights in an attempt to stabilize water levels in the basin.
- 25. The Nye County Water Resources Plan adopted in 2004 and the update to the Plan in 2017, describe the existing problems posed by the proliferation of domestic wells in Pahrump and the potential consequences of drilling up to 8,000 new domestic wells. In December 2017, the Board of the Nye County Water District voted to approve sending a letter to the State Engineer providing support for the State Engineer's issuance of an order requiring relinquishment or dedication of water rights for new domestic wells. 13

NOW THEREFORE, it is hereby ordered that the drilling of any new domestic well within the Pahrump Artesian Basin is prohibited, except that:

- 1. Any person proposing to drill a new domestic well must obtain an existing water right in good standing, subject to review of the State Engineer of not less than 2.0 acre-feet annually and relinquish the water right to serve the domestic well.
- 2. Any entity that has already relinquished sufficient water rights to serve a new domestic well is excepted from this order.
- 3. A domestic well requiring rehabilitation as defined by NAC § 534.189 is hereby excepted.

¹³ Correspondence from Oscar (Oz) Wichman on behalf of the Nye County Water District to Jason King, December 11, 2016 [sic].

4. The reconditioning of a domestic well as defined by NAC § 534.188, or replacement of an existing domestic well is excepted from this Order, unless the well is located in an area where water can furnished by an entity such as a water district or a municipality presently engaged in furnishing water to the inhabitants thereof.

JASON KING, P.E. State/Engineer Dated at Carson City, Nevada this 19 TH day of DECEMBER